

REMARKS

Claims 67-126 are pending in the application.

Claims 67-126 have been rejected.

Claims 67, 85, 101, and 110 have been amended.

Applicants express appreciation for the interview conducted on October 9, 2007. During the interview Applicants and Examiner discussed amending the independent claims to more clearly distinguish over the cited art. Specifically, Examiner suggested that Applicants clarify that, in contrast to the cited references, “throttling” is based on a given *client’s* traffic handling ability at a given time, and that each queue (at least one is provided for each device to which data is to be transmitted) is individually responsive to “backpressure” from the queue’s associated destination client. In accordance with the discussion held in the interview, Applicants herein amend independent claims 67, 85, 101, and 110 to further clarify the above distinctions. For the sake of explanation, further discussion of these amendments is below.

Rejection of Claims under 35 U.S.C. §103(a)

Claims 67-125 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Knightly (USPPN 2003/0163593) in view of Lahat (USPN 6,201,792) hereinafter referred to as (“Lahat”). Applicants respectfully traverse this rejection.

Independent claims 67, 85, 101, and 110, as amended, include substantially the following limitations:

receiving information generated by the client of the first MAC device indicating a need to change an amount of data being transmitted to the client of the first MAC device; and
selectively transmitting data stored in the first queue to the first MAC device,
wherein
a rate at which the selectively transmitting is performed is based at least in part on at least a portion of the information indicating the need to change the amount of data being transmitted to the client of the first MAC device.

See, e.g., Claim 67 (amended). Applicants respectfully submit that neither Knightly nor Lahat, alone or in combination, teaches these limitations.

The Office Action, dated September 10, 2007, cites Knightly ¶ 47 for the proposition that it teaches the first limitation (without the amendment “generated by the client of the first MAC device”) and ¶ 48 as teaching the second. ¶ 47 reads:

Next, RPR nodes have measurement modules (byte counters) to measure demanded and/or serviced station and transit traffic. These measurements are used by the fairness algorithm to compute a feedback control signal to throttle upstream nodes to the desired rates. Nodes that receive a control message use the information in the message, perhaps together with local information, to set the bandwidths for the rate controllers 304 (see FIG. 3).

Knightly ¶47 (cited at Office Action, p.3). The cited paragraph discloses modules measuring station and transit traffic, using those measurements to throttle upstream nodes to desired rates, and setting bandwidths. This emphasizes that the desired rates correspond to specific bandwidth allocations, which is consistent with the purpose described in the Abstract.

A system and method for dynamic bandwidth allocation is provided. The method provides one or more nodes to compute a simple lower bound of temporally and spatially aggregated virtual time using per-ingress counters of packet (byte) arrivals. Thus, when information is propagated along the ring, each node can remotely approximate the ideal fair rate for its own traffic at each downstream link. In this way, flows on the ring rapidly converge to their ring-wide fair rates while maximizing spatial reuse.

Knightly, Abstract. *See also*, Knightly, ¶8 (discussing spatial reuse and link bandwidth fairness). However, such methodology does not recognize the claimed disclosure of using information generated by a client of a MAC device to set a rate for selectively transmitting data to that client from a queue corresponding to that client.

Paragraph 48 of Knightly similarly fails to disclose the amended limitations.

The final component is the scheduling algorithm that arbitrates service among station and transit traffic. In single-queue mode, the transit path consists of a single FIFO queue referred to as the Primary Transit Queue (PTQ). In this case, the scheduler employs strict priority of transit traffic over station traffic. In dual-queue mode, there are two transit path queues, one for guaranteed Class A traffic (PTQ), and the other for Class B and C traffic, called Secondary Transit Queue (STQ). In this mode, the scheduler always services Class A transit traffic first from PTQ. If this queue is empty, the scheduler employs round-robin service among the transit traffic in STQ and the station traffic until a buffer threshold is reached for STQ. If STQ reaches the buffer threshold, STQ transit traffic is always selected over station traffic to ensure a lossless transit path. In other words, STQ has strict priority over station traffic once the buffer threshold is crossed; otherwise, service is round robin among transit and station traffic.

Knightly, ¶48 (cited at Office Action, p.3). This paragraph reflects arbitration between outgoing station traffic and transit traffic, and between multiple priority transit traffic. The cited sections disclose no awareness of traffic handling capabilities of particular clients. The cited sections disclose no methodology of making adjustments based on those capabilities. Instead, the cited sections simply disclose a bandwidth fairness algorithm to promote efficient utilization of ring bandwidth resources. *See e.g.*, Knightly, ¶7.

For at least these reasons, Applicant submits that claims 67, 85, 101, and 110 are in condition for allowance, as are the claims which depend therefrom. Applicant therefore respectfully requests the Examiner's reconsideration and withdrawal of the rejections as to these claims and an indication of the allowability of same.

CONCLUSION

In view of the amendments and remarks set forth herein, the application and the claims therein are believed to be in condition for allowance without any further examination and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephone interview, the Examiner is invited to telephone the undersigned at 512-439-5092.

If any extensions of time under 37 C.F.R. § 1.136(a) are required in order for this submission to be considered timely, Applicant hereby petitions for such extensions. Applicant also hereby authorizes that any fees due for such extensions or any other fee associated with this submission, as specified in 37 C.F.R. § 1.16 or § 1.17, be charged to deposit account 502306.

Respectfully submitted,



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